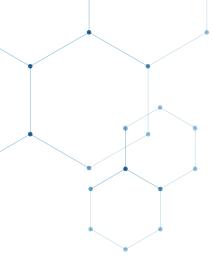
TEACHER TURNOVER IN PUBLIC SCHOOLS:

A NATIONAL PROBLEM

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Teachers are a school's most valuable resource. Studies consistently find that, of all school-related factors, teachers have the largest impact on student's academic and social-emotional development (Blazar & Kraft, 2017; Nye, Konstantopoulos, & Hedges, 2004; Rockoff, 2004). Developing and retaining an effective teaching staff is perhaps the most important avenue through which administrators can support school improvement efforts (Simon & Johnson, 2015). Yet, the "revolving door" of teaching—a phenomenon defined by "large numbers of quality teachers depart[ing] their jobs for reasons other than retirement" (Ingersoll, 2001, p. 501) persists across American public schools.

Teacher turnover is a significant problem in U.S. public schools. Ingersoll and colleagues (2003) report that between 40 and 50 percent of new teachers leave teaching within the first five years. Minority teachers depart from schools at far higher rates than their White counterparts—a rate that has increased substantially in the last four decades (Ingersoll, May, & Collins, 2017, 2019). Large urban school districts often experience even higher rates of turnover (Ingersoll, 2001; Papay et al., 2020) and many urban schools lose over half of their teaching staff every five years (Allensworth, Ponisciak, & Mazzeo, 2009; Hemphill & Nauer, 2009; Marinell & Coca, 2013). Furthermore, teachers disproportionally leave large urban school districts for suburban, high-achieving, high-income schools (Lankford, Loeb, and Wyckoff, 2002; Ingersoll & May, 2012). Consequently, children attending high-poverty schools are more likely than their peers in wealthier schools to experience inconsistent staffing from one year to the next and to be taught by teachers who are new to their school and, frequently, new to the profession (Hanushek et al., 2004; Hemphill & Nauer, 2009; Johnson et al., 2005).

Schools pay a high price when they lose teachers. In addition to generating substantial financial costs (Barnes, Crowe, & Schaefer, 2007; Birkeland & Curtis, 2006; Milanowski & Odden, 2007), turnover also creates organizational instability. This contributes to a cycle of poor working conditions, which profoundly influences teachers' career decisions (for a review, see Simon & Johnson, 2015) and makes it difficult for principals to hire teachers who are a strong match for their school (Neild, Useem, Travers, & Lesnick, 2003; Liu, Rosenstein, Swan & Khalil, 2008). Consequently, turnover negatively affects student achievement, particularly among students who live in low-income communities (Ronfeldt, Loeb, & Wyckoff, 2013).

Reducing turnover among effective teachers is of central importance for improving the quality of education in U.S. public schools. Below, we review the research behind the 21 factors assessed in the Teach Upbeat Survey. Evidence suggests that these factors—all

components of a teacher's working conditions—predict and explain teacher turnover. For the purposes of this review, we organize them into five broad categories: School Leadership Opportunities; Teacher Development Practices and Resources; Teacher Hiring and Career Development; Inclusive Practices and Equal Opportunities; and Personal & Organizational Purpose.

School Leadership Opportunities

Teachers are best supported when they work in environments characterized by trust, respect, and commitment to student learning. They desire to be treated with respect for their professional expertise and experience. When administrators engage teachers as collaborators by developing teacher leadership positions or granting them instructional autonomy, teachers are more likely to describe their work environments positively (Johnson et al., 2014). Likewise, when teachers have opportunities to collaborate with peers and parents, they are more successful in their work with students (Allensworth et al., 2009; Kraft et al., 2015), and ultimately, they are more likely to stay in their positions (Johnson, Kraft, & Papay, 2012; Simon & Johnson, 2015).

School Safety and Order: Teachers leave schools where a lack of student discipline impedes their ability to teach (Allensworth et al., 2009; Johnson et al., 2005; Ladd, 2011; Marinell & Coca, 2013). Viano and colleagues (2020) demonstrate that enforcement of discipline—a "malleable factor" (p. 1) within the principal's locus of control—is one of the most critical factors in teachers' decisions about where to teach. Not surprisingly, schools with high rates of student misbehavior, crime, violence, and bullying have high rates of teacher turnover (Allensworth et al., 2009; Kraft, Marinell, &Yee, 2016). It is especially important to teachers that they have administrative and parental support to address student behavior (Bryk et al., 2010) and that they agree with their school's approach to student conduct.

Autonomy: Teachers expect to use their professional expertise to inform their curriculum design and pedagogical practice (Johnson, 2019). They are more likely to stay in schools where they believe that their colleagues have a "can do" attitude and collaborate on school improvement (Allensworth et al., 2009; Johnson et al., 2012; Johnson, 2019). In addition, through interviews with teachers, Johnson and colleagues (2004) found that turnover rates are higher when teachers do not have autonomy over instructional choices.

Principal/Teacher Trust: Teachers are more likely to succeed in a school culture characterized by high expectations, trust, and mutual respect among administrators and teachers (Kraft & Papay, 2014). Relational trust between principals and teachers creates a stable and supportive professional environment (Bryk & Schneider, 2002; Bryk et al., 2010).

Instructional Leadership: Teachers are more likely to stay in schools where their principals recognize the many things that they, as school leaders, can do to influence instruction and invest in it (Bryk et al., 2010). Teachers cite support from administrators as the most important influence on their career decisions (Boyd et al., 2011; Ingersoll, 2001). Those who do not view their principals as instructional leaders are more likely to leave (Ingersoll, 2001;

Ladd, 2011; Luekens et al., 2004). The effectiveness of school principals is a particularly important predictor of turnover in schools with large numbers of disadvantaged students (Grissom, 2011).

Collaboration: Teachers want to work in schools where educators support one another by "teach[ing] each other the practice of teaching" (Little, 1982, p. 331) and they are more likely to stay in schools that support them in doing so (Simon & Johnson, 2015). Smith and Ingersoll (2004) found that first-year teachers who were given time to collaborate with colleagues were less likely to leave after their first year of teaching. Similarly, Johnson, Reinhorn, and Simon (2018) found that successful high-poverty schools relied on formal instructional teams as a central mechanism for school improvement. Teachers reported that their teams supported their instruction and contributed to their school's success by creating coherence across classrooms and shared responsibility for students. Kardos and colleagues (2001) found that in such schools—those with an "integrated professional culture" (p. 250)—teachers' work responsibilities were "deliberately arranged to intersect" (p. 277) through exchanges that drew on both the new ideas of novices and the wisdom of veterans. Consequently, teachers with various lengths of tenure viewed themselves as belonging to a collective with joint responsibility for each other, their students, and their community. Ultimately, this led to greater satisfaction with the schools.

Parent/Teacher Communication: Regular and effective teacher-parent communication builds trust and encourages teachers to stay in their schools (Loeb, Darling-Hammond, & Luczak, 2005; Johnson, 2019).

Communication between teachers and parents also increases relational trust (Bryk et al., 2010). Teachers are more likely to stay in schools where parents are involved in their children's education, supportive of teachers (Allensworth et al., 2009), and engaged in "joint problem solving" about student behavior (Bryk et al., 2010, p. 58). This type of parent-teacher interaction is far more predictive of teacher retention than are other forms of parent engagement, such as helping with their child's schoolwork (Allensworth et al., 2009).

Appreciation: Teaching is a demanding profession, and as organizational psychology and management research suggests, recognizing employee contributions can improve employee retention (Brun & Dugas, 2008). Among teachers, Gonzalez (1995) found that appreciation from administrators, students, and parents improved job satisfaction and increased a teacher's likelihood of remaining in their classroom. Yet, teachers often feel underappreciated and rarely report being publicly recognized by their principal for their work (TNTP, 2012).

Farkas, Johnson, & Foleno (2000) found few teachers felt respected and appreciated, while many felt that they were "scapegoats for all the problems facing education" (p. 16).

Teacher Development Practices and Resources

Teachers are more likely to stay in schools that support their ongoing development, provide regular feedback on instruction, and offer a fair evaluation of their practice (Johnson, 2004; Johnson, 2019; Loeb et al., 2005). In addition, teachers require physical resources to perform their job well. Working conditions that support teachers are also supportive learning conditions for students (Bryk et al., 2010; Johnson et al., 2012).

Professional Development: Teachers need to be prepared to teach well. Novice teachers, in particular, are in need of targeted professional development (Johnson & Birkeland, 2003). Effective professional development should be delivered in a manner that aligns with a school's instructional goals, includes active learning experiences, allows for collaboration, is focused on subject-matter-specific content, and provides expert coaching and feedback—all over a sustained duration that affords teachers opportunities for incremental change to their instruction (Darling-Hammond, Hyler, & Gardner, 2017; Desimone & Garet, 2015; Hill, 2007) The quality of a school's professional development is among the strongest determinants of teachers' satisfaction with their working conditions and subsequent retention (Loeb et al., 2005).

Work/Life Balance: Teachers are more satisfied with their jobs when they have a reasonable teaching load (Borman & Dowling, 2008; Johnson, 2004; Luekens et al., 2004). Too often, teachers leave high-poverty and under-performing schools when they are assigned large classes, classes that are outside their expertise, or classes that span multiple subjects or grade levels (Simon & Johnson, 2015). It is common for novice teachers in such schools to cope with several aspects of misassignment simultaneously, which also bears heavily on their ability to teach effectively (Donaldson & Johnson, 2010; Ingersoll, 2002; Johnson, Berg, & Donaldson, 2005). Johnson (2019) also found that teachers in schools with unusually long hours also report struggling to maintain balance between work and home-life and frequently plan to depart.

Resources and Facilities: Teachers' ability to teach is shaped by school building conditions and the educational resources available (Simon, Evans & Maxwell, 2007). As such, the quality of the physical environment in which teachers work has a substantial effect on their retention (Buckley, Schneider, & Shang, 2005). Loeb et al. (2005) found that one of the strongest predictors of teacher turnover is a lack of appropriate facilities, technology, textbooks and instructional materials. Johnson et al. (2012) found a similar relationship between teachers' perceptions of school resources and the likelihood that they stay at their schools.

Evaluation: When teachers perceive their evaluation process as fair and supportive, they are more likely to stay, to be more effective with students, and to improve at greater rates over time (Dee & Wyckoff, 2015; Kraft & Papay, 2014; Taylor & Tyler, 2012). In schools that retain teachers, principals think about their teachers as learners and commit to helping them improve continually (Borman & Dowling, 2008; Cochran-Smith et al., 2012; Johnson & Birkeland, 2003). Teachers want to work for principals who regularly conduct fair evaluations of their teaching practice and, in the process, provide useful suggestions for improving pedagogy (Reinhorn & Johnson, 2014; Reinhorn et al., 2017; Johnson, 2019).

Teacher Hiring and Career Development

Teachers remain in schools where administrators invest in human capital by hiring skilled teachers and support staff who are committed to their school's mission (Liu & Johnson, 2006; Simon, Johnson, & Reinhorn, 2019), encourage teacher leadership and input in decision-making (Allensworth et al., 2009), invest in teachers' advancement (Ingersoll, 2001), and care about teachers' well-being (Farkas et al., 2000).

Teacher Voice and Leadership: Being involved in making decisions about school culture is important to teachers (Boyd et al., 2011; Ingersoll, 2001; Johnson et al., 2012). Teachers value open communication with their administrators (Kraft et al., 2016; Johnson, 2019) and often assume additional responsibilities as a part of a school's structure of distributed leadership (Spillane, 2012; Supovitz, D'Auria, & Spillane, 2019). Staffing stability is higher in schools where teachers report having strong relationships with their school principal and having influence over decision making (Allensworth et al., 2009), including being engaged in hiring fellow colleagues (Simon et al., 2019).

Recruitment, Hiring, and Onboarding: Effective teacher hiring is fundamental to school improvement (Simon et al., 2019). Teachers who are hired through an "information-rich process"—one that promotes exchanges about whether a candidate's skills, interests and needs align with a school's mission, programs, and expectations—are more satisfied with their jobs and more likely to stay in their positions (Liu & Johnson, 2006). Teachers who are hired late often experience an "information-poor process" and, subsequently, are more likely to leave than their peers who are hired on time (Liu & Johnson, 2006; Papay & Kraft, 2016). They are also less likely to benefit from a hiring process that serves as the first step of induction into their new school (Simon et al., 2019). Teachers who participate in an induction program and have support from a mentor teacher in their field are less likely to leave schools and teaching in general after their first year (Smith & Ingersoll, 2004).

Compensation and Career Path: Opportunities for professional advancement and pay increases are important for teacher retention. Ingersoll (2001) found that 25% of teacher departures are explained by a desire to pursue a better job, a different career, or to improve their career options in education. Most public-school teachers believe that they have few opportunities for advancement, and that the lack of upward mobility is a detractor (Farkas et al., 2000). Teachers also often report dissatisfaction with low salaries; teachers in school districts offering comparatively high salaries stay longer than teachers in districts offering low salaries (Gray & Taie, 2015; Ingersoll, 2001; Johnson & Birkeland, 2003; Kirby, Berends, & Naftel, 1999; Murnane, Singer, & Willett, 1991). In a recent study of teachers' preferences during the hiring process, Viano and colleagues (2020) found that salary is the most important "structural feature of employment" that teachers consider in deciding where to work.

Belonging and Wellbeing: Despite the fact that teachers may enjoy their profession, myriad pressures negatively impact the extent to which they enjoy their work (Kells, 2018). Relatedly, teachers' resilience reflects their ability to consistently provide instruction in the face of

challenge (Brunetti, 2006; Hwang et al., 2017)—an attribute that bolsters teacher retention (Tait, 2008). Teacher wellbeing reflects how they perceive their quality of life on personal, professional, and relational levels (Spilt et al., 2011). Teachers' sense of belonging at work is related to their wellbeing (von der Embse & Mankin, 2020) and is an important factor in retention efforts (Kelchtermans, 2017).

Inclusive Practices and Equal Opportunities

Attracting and retaining teachers of color has long been a challenge for school leaders (Achinstein et al., 2010). This trend reflects a teacher pipeline and retention problem, as well as a lack of resources in schools where most teachers of color work (Ingersoll et al., 2018). In addition to bolstering tangible supports in under-resourced work environments, creating equitable and inclusive school communities for teachers, students, and families is a critical component of teacher retention, particularly for teachers of color (Grissom & Keiser, 2011; Bristol, 2020). Fostering a welcoming environment involves directly addressing issues of power and privilege and attending to relational dynamics and local culture (Bryk & Schneider, 2002; Bristol, 2020; Simon, Johnson & Reinhorn, 2015).

Equal Opportunities: School leaders must be intentional about employing equitable practices in their work with teachers. Teachers respect principals who treat them fairly (Simon & Johnson, 2015; Grissom & Keiser, 2011), and report leaving schools to avoid principals who are "arbitrary, abusive, or neglectful" (Johnson & Birkeland, 2003, p. 594). When they transfer, teachers seek out "fair and encouraging" leaders (p. 599). However, as compared to their White counterparts, teachers of color frequently experience inequitable pay and access to career advancement (Grissom & Keiser, 2011) and, by comparison, may be given more challenging job duties (Campbell & Ronfeldt, 2018; Madsen & Mabokela, 2014; Steinberg & Sartain, 2020). Grissom & Keiser (2011) found this to be especially true when Black teachers reported to White principals—a trend that may explain why, as teachers gain experience, they sort toward schools with principals of the same race.

Inclusive Practices: Inclusive practices is critical to fostering feelings of belonging and connectedness that make individuals want to stay with an organization (Brown, 2018; Carr et al., 2019). In an inclusive school culture, all members of the community, including teachers, students, and families feel that they belong. Collegial relationships play a crucial role in teachers' job satisfaction and are a key component of a school's working conditions (Johnson & Birkeland, 2003; Johnson et al., 2004; Kapadia, Coca, & Easton, 2007). Therefore, teachers' experiences with their co-workers are critical to their feelings of belonging in a school and, ultimately, to their decisions about whether to stay or go. For teachers of color, their colleagues' interactions with families play a particularly important role in their own sense of inclusion. When engagement with marginalized communities positions families and students as problematic (Yosso, 2005)—thereby reifying power differentials that distance teachers and families from each other (Bryan, Williams, & Griffin, 2020)—it diminishes a sense of inclusion in the community.

Personal and Organizational Purpose

In his landmark study of teachers nearly five decades ago, Lortie found that teachers are frequently drawn to the profession by the "psychic rewards" (Lortie, 1975, p. 101) of working with students and because they want to make a difference in their lives. This remains true today, especially among teachers working with historically underserved students in high-poverty schools (Simon & Johnson, 2015; Simon et al., 2019). However, when teachers find that their school environments thwart their efforts, they often leave.

Care and Commitment: Teachers are more likely to stay in a school where they have positive relationships with other teachers. Johnson et al. (2012) found that teachers prefer to work in a supportive school culture where their colleagues are committed to their students' academic success. Teachers are also more likely to stay in a school where their colleagues are committed to and have a sense of collective responsibility for, improving their school (Allensworth, et al., 2009; Johnson, 2019) and where they trust that their colleagues care about and are committed to the students (Bryk & Schneider, 2002).

Satisfaction and Purpose: Many teachers enter the profession because they see it as a life-long "calling" (Farkas et al., 2000, p. 10). Teachers frequently begin teaching in high-poverty schools because of their "humanistic commitment" to teaching in long underserved communities (Achinstein et al., 2010, p. 71; Cochran-Smith et al., 2012; Kraft et al., 2013). When these teachers leave, it is frequently because the working conditions in their schools impede their chance to teach and their students' chance to learn (Johnson, 1990, 2006; Johnson & Birkeland, 2003; Simon & Johnson, 2015).

Future Commitment: Teachers' intentions to leave are strong predictors of their actual departure (Cohen et al., 2016; Ladd, 2011; Nguyen et al., 2022). Research shows that 33% of teachers who intended to leave the profession did so within a year, compared to just 7% of those without such intentions, reflecting a nearly 400% higher likelihood of leaving (Nguyen et al., 2022).

Employees' likelihood of recommending their organization to others is closely tied to their sense of belonging at work and their intention to stay (Legerstee, 2013; Sedlak, 2020). Research suggests that teachers who would recommend their school to a friend often feel a strong sense of belonging and are more likely to stay in their roles. On their own, teachers' senses of belonging and wellbeing are also strongly related to retention (Hanson & Kraft, 2024).

Self-Efficacy: Teachers' self-efficacy—a teacher's belief in his or her "capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Hoy, 2001, p. 283)—is correlated with teacher retention (Chan et al., 2008; Johnson & Birkeland, 2003; Tschannen-Moran & Hoy, 2001). Johnson and Birkeland (2003) reported that although teachers' personal circumstances influenced their career decisions, it was their "sense of success" (p. 581) with their own students that most influenced their decision about whether to stay in their school, move to a different school, or leave teaching altogether. Overall, the teachers said that it was the environment of their school that made success likely—or unlikely.

Conclusion

Many factors contribute to teachers' sense of satisfaction in their workplaces. District office and school-based administrators have the potential to anticipate and plan for turnover by understanding the settings, experiences, and personal qualities of the teachers they employ. Data on these predictors can also be used to inform efforts to reduce turnover through targeted interventions. When administrators understand the factors that influence teacher retention, they can more effectively work to create conditions that support and retain teachers.

References

- Achinstein, B., & Ogawa, R. (2011). Change(d) agents: New teachers of color in urban schools. Teachers College Press.
- Achinstein, B., Ogawa, R. T., Sexton, D., & Freitas, C. (2010). Retaining teachers of color: A pressing problem and a potential strategy for "hard-to-staff" schools. Review of Educational Research, 80(1), 71-107.
- Allensworth, E., Ponisciak, S., & Mazzeo, C. (2009). The schools teachers leave: Teacher mobility in Chicago Public Schools. Consortium on Chicago School Research, University of Chicago.
- Barnes, G., Crowe, E., & Schafer, B. (2007). The cost of teacher turnover in five school districts: A pilot study. National Commission on Teaching and America's Future.
- Birkeland, S.E. & Curtis, R.E. (2006). Ensuring the support and development of new teachers in the Boston Public Schools: A proposal to improve teacher quality and retention. Boston Public Schools.
- Blazar, D., & Kraft, M. A. (2017). Teacher and teaching effects on students' attitudes and behaviors. Educational Evaluation and Policy Analysis, 39(1), 146-170.
- Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. Review of Educational Research, 78(3), 367-409.
- Boser, U. (2014). Teacher diversity revisited: A new state-by-state analysis. Center for American Progress.
- Boyd, D. Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. American Educational Research Journal. 48(2), 302-333.
- Bristol, T. J. (2020). A tale of two types of schools: An exploration of how school working conditions influence Black male teacher turnover. Teachers College Record, 122(3), 1-41.

- Brown, K. (2018). To retain employees, focus on inclusion—not just diversity. Harvard Business Review.
- Brun, J. P., & Dugas, N. (2008). An analysis of employee recognition: Perspectives on human resources practices. The International Journal of Human Resource Management, 19(4), 716-730.
- Brunetti, G. J. (2006). Resilience under fire: Perspectives on the work of experienced, inner city high school teachers in the United States. Teaching and Teacher Education, 22(7), 812-825.
- Bryan, J., Williams, J. M., & Griffin, D. (2020). Fostering educational resilience and opportunities in urban schools through equity-focused school-family-community partnerships. Professional School Counseling, 23(1), 1-14.
- Bryk, A. S., & Schneider, B. L. (2002). Trust in schools: A core resource for school reform. Russell Sage Foundation Publications.
- Bryk, A. S., Sebring, P. B., Allensworth, E., Easton, J. Q., & Luppescu, S. (2010). Organizing schools for improvement: Lessons from Chicago. University of Chicago Press.
- Buckley, J., Schneider, M., & Shang, Y. (2005). Fix it and they might stay: School facility quality and teacher retention in Washington, D.C. Teachers College Record, 107(5), 1107-1123.
- Campbell, S. L., & Ronfeldt, M. (2018). Observational evaluation of teachers: Measuring more than we bargained for? American Educational Research Journal, 55(6), 1233-1267.
- Carr, E., Reece, A., Kellerman, G.R., & Robichaux, A. (2019). The value of belonging at work. Harvard Business Review.
- Chan, W., Lau, S., Nie, Y., Lim, S., & Hogan, D. (2008). Organizational and personal predictors of teacher commitment: The mediating role of teacher efficacy and identification with school. American Educational Research Journal, 45(3), 597-630.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2011). Teacher mobility, school segregation, and pay-based policies to level the playing field. Education Finance and Policy, 6(3), 399-438.
- Cochran-Smith, M., McQuillan, P., Mitchell, K., Terrell, D. G., Barnatt, J., D'Souza, . . .Gleeson, A. (2012). A longitudinal study of teaching practice and early career decisions: A cautionary tale. American Educational Research Journal, 49(5), 844-880.
- Coffey, H., & Farinde-Wu, A. (2016). Navigating the journey to culturally responsive teaching: Lessons from the success and struggles of one first-year, Black female teacher of Black students in an urban school. Teaching and Teacher Education, 60, 24-33.
- Cohen, G., Blake, R., & Goodman, D. (2016). Does turnover intention matter? Evaluating the usefulness of turnover intention rate as a predictor of actual turnover rate. *Review of Public Personnel Administration*, 36(3), 240–263. https://doi.org/10.1177/0734371X15581850

- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute.
- Dee, T. S. (2005). A teacher like me: Does race, ethnicity, or gender matter?. American Economic Review, 95(2), 158-165. Dee, T. S., & Penner, E. K. (2017). The causal effects of cultural relevance: Evidence from an ethnic studies curriculum. American Educational Research Journal, 54(1), 127-166.
- Dee, T. S., & Wyckoff, J. (2015). Incentives, selection, and teacher performance: Evidence from IMPACT. Journal of Policy Analysis and Management, 34(2), 267-297.
- Desimone, L. M., & Garet, M. S. (2015). Best practices in teachers' professional development in the United States. Psychology, Society and Education, 7(3), 252-263.
- Donaldson, M. L., & Johnson, S. M. (2010). The price of misassignment: The role of teaching assignments in Teach For America teachers' exit from low-income schools and the teaching profession. Educational Evaluation and Policy Analysis, 32(2), 299-323.
- Egalite, A. J., Kisida, B., & Winters, M. A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. Economics of Education Review, 45, 44-52.
- Farkas, S., Johnson, J., & Foleno, T. (2000). A sense of calling: Who teaches and why. Public Agenda.
- Gershenson, S., Hart, C., Lindsay, C. A., & Papageorge, N. W. (2017). The long-run impacts of same-race teachers (IZA Discussion Paper No. 10630). Institute for the Study of Labor (IZA)
- Gonzalez, P. (1995). Factors that influence teacher attrition. National Association of State Directors of Special Education.
- Grissom, J. (2011). Can good principals keep teachers in disadvantaged schools? Linking principal effectiveness to teacher satisfaction and turnover in hard-to-staff environments. Teachers College Record, 113(11), 2552-2585.
- Grissom, J. A., & Keiser, L. R. (2011). A supervisor like me: Race, representation, and the satisfaction and turnover decisions of public sector employees. Journal of Policy Analysis and Management, 30(3), 557-580.
- Hanson, H. & Kraft, M. (2024). *The importance of teacher working conditions for teacher retention in the post-COVID era.* New York, NY: Teach Upbeat.
- Hanson, H. & Kraft, M. (2024). *Belonging & wellbeing: Key pieces of the teacher retention puzzle.* New York, NY: Teach Upbeat. https://bit.ly/BelongingWellbeing.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). Why public schools lose teachers. Journal of Human Resources, 39(2), 326-354.

- Hemphill, C., & Nauer, K. (2009). The new marketplace: How small-school reforms and school choice have reshaped New York City's high schools. Center for New York City Affairs. The New School for Management and Urban Policy.
- Hill, H. C. (2007). Learning in the teaching workforce. The Future of Children, 17(1), 111-127.
- Hwang, Y. S., Bartlett, B., Greben, M., & Hand, K. (2017). A systematic review of mindfulness interventions for in-service teachers: A tool to enhance teacher wellbeing and performance. Teaching and Teacher Education, 64, 26-42.
- Ingersoll, R. M. (2001). A different approach to solving the teacher shortage problem. Center for the Study of Teaching and Policy, University of Washington.
- Ingersoll, R. M. (2002). Out-of-field teaching, educational inequality, and the organization of schools: An exploratory analysis. Center for the Study of Teaching and Policy, University of Washington.
- Ingersoll R. (2003). Is there really a teacher shortage? Consortium for Policy Research in Education.
- Ingersoll, R. M., & May, H. (2011). Recruitment, retention and the minority teacher shortage. Consortium for Policy Research in Education.
- Ingersoll, R., & May, H. (2012). The magnitude, destinations and determinants of mathematics and science teacher turnover. Educational Evaluation and Policy Analysis, 34(4), 435-464.
- Ingersoll, R., May, H., & Collins, G. (2017). Minority teacher recruitment, employment and retention: 1987 to 2013. Learning Policy Institute.
- Ingersoll, R., May, H., & Collins, G. (2019). Recruitment, employment, retention and the minority teacher shortage. Education Policy Analysis Archives, 27(37).
- Ingersoll, R. M., Merrill, E., Stuckey, D., & Collins, G. (2018). Seven trends: The transformation of the teaching force. Consortium for Policy Research in Education.
- Johnson, S. M. (1990). Teachers at work: Achieving success in our schools. Basic Books.
- Johnson, S.M. (2004). Finders and keepers: Helping new teachers survive and thrive in our schools. John Wiley & Sons, Inc. Johnson, S. M. (2006). The workplace matters: Teacher quality, retention, and effectiveness National Education Association Research Department.
- Johnson, S. M. (2019). Where teachers thrive: Organizing schools for success. Harvard Education Press.
- Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). Who stays in teaching and why? A review of the literature on teacher retention. National Retired Teachers Association.

- Johnson, S. M. & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. American Educational Research Journal, 40(3), 581-617.
- Johnson, S. M., Kardos, S. M., Kauffman, D., Liu, E. & Donaldson, M. L. (2004). The support gap: New teachers' early experiences in high-income and low-income schools. Education Policy Analysis Archives, 12(61).
- Johnson, S.M., Kraft, M.A., & Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. Teachers College Record, 114(10), 1-39.
- Johnson, S.M., Reinhorn, S. K., Charner-Laird, M., Kraft, M.A., Ng, M., & Papay, J.P. (2014). Ready to lead, but how? Teachers' experiences in high-poverty schools. Teachers College Record, 116(10), 1-50.
- Johnson, S. M., Reinhorn, S., & Simon, N. S. (2018). Ending isolation: the payoff of teacher teams in successful high-poverty urban schools. Teachers College Record, 120(5), 1-46.
- Kapadia, K., Coca, V., & Easton, J. Q. (2007). Keeping new teachers: A first look at the influences of induction in the Chicago Public Schools. Consortium on Chicago School Research, University of Chicago.
- Kardos, S. M., Johnson, S. M., Peske, H. G., Kauffman, D., & Liu, E. (2001). Counting on colleagues: New teachers encounter the professional cultures of their schools. Educational Administration Quarterly, 37(2), 250-290.
- Kelchtermans, G. (2017). 'Should I stay or should I go?': Unpacking teacher attrition/retention as an educational issue. Teachers and Teaching, 23(8), 961-977.
- Kells, E. (2018). How to survive in teaching without imploding, exploding or walking away. Bloomsbury Publishing. Kirby, S. N., Berends, M., & Naftel, S. (1999). Supply and demand of minority teachers in Texas: Problems and prospects. Educational Evaluation and Policy Analysis, 21(1), 47-66.
- Kraft, M.A., Marinell, W. H., & Yee, D.S. (2016). School organizational context, teacher turnover, and student achievement evidence from panel data. American Educational Research Journal 53(5), 1411-1449.
- Kraft, M.A. & Papay, J.P. (2014). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. Educational Evaluation and Policy Analysis, 36(4), 476-500.
- Kraft, M. A., Papay, J. P., Johnson, S. M., Charner-Laird, M., Ng, M., & Reinhorn, S. (2015). Educating amid uncertainty: The organizational supports teachers need to serve students in high-poverty, urban schools. Educational Administration Quarterly, 51(5), 753-790.
- Ladd, H. (2011). Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement? Educational Evaluation and Policy Analysis, 33(2), 235-261.

- Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher sorting and the plight of urban schools: A descriptive analysis. Education Evaluation and Policy Analysis, 24(1), 37-62.
- Legerstee, T. (2013). Asking employees the 'ultimate question': Developing the employee promoter score. hdl.handle.net/2105/17875
- Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. American Educational Research Journal, 19(3), 325-340.
- Liu, E, & Johnson, S. M. (2006). New teachers' experiences of hiring: Late, rushed, and information poor. Educational Administration Quarterly, 42(3), 324-360.
- Liu, E., Rosenstein, J. G., Swan, A. E., & Khalil, D. (2008). When districts encounter teacher shortages: The challenges of recruiting and retaining mathematics teachers in urban districts. Leadership & Policy in Schools, 7(3), 296-323.
- Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How teaching conditions predict teacher turnover in California schools. Peabody Journal of Education, 80(3), 44-70.
- Lortie, D. C. (1975). Schoolteacher: A sociological study. University of Chicago Press.
- Luekens, M. T., Lyter, D. M., Fox, E. E., & Chandler, K. (2004). Teacher attrition and mobility: Results from the teacher follow-up survey, 2000-01. National Center for Education Statistics.
- Madsen, J., & Mabokela, R. (2014). Leadership challenges in addressing changing demographics in schools. NASSP Bulletin, 98(1), 75-96.
- Marinell, W. H., & Coca, V. M. (2013). Who stays and who leaves?: Findings from a three-part study of teacher turnover in NYC middle schools. The Research Alliance for New York City Schools.
- Matias, C. E. (2013). On the "flip" side: A teacher educator of color unveiling the dangerous minds of White teacher candidates. Teacher Education Quarterly, 40(2), 53-73.
- Milanowski, A. & Odden, A. (2007). A new approach to the cost of teacher turnover. School Finance Redesign Project, Center on Reinventing Public Education.
- Murnane, R., Singer, J. D., & Willett, J. B. (1991). Who will teach?: Policies that matter. Harvard University Press. Neild, R. C., Useem, E., Travers, E., & Lesnick, J. (2003). Once and for all: Placing a highly qualified teacher in every Philadelphia classroom. Research for Action.
- Nguyen, T. D., Bettini, E., Redding, C., & Gilmour, A. F. (2022). *Comparing turnover intentions and actual Turnover in the public sector workforce: Evidence from public school teachers.* (EdWorkingPaper: 22-537). Annenberg Institute at Brown University. https://doi.org/10.26300/3ag0-pv52.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? Educational Evaluation and Policy Analysis, 26(3), 237-257.

- Ouazad, A. (2014). Assessed by a teacher like me: Race and teacher assessments. Education Finance and Policy, 9(3), 334-372. Papageorge, N. W., Gershenson, S., & Kang, K. M. (2020). Teacher expectations matter. Review of Economics and Statistics, 102(2), 234-251.
- Papay, J. P., Taylor, E. S., Tyler, J. H., & Laski, M. E. (2020). Learning job skills from colleagues at work: Evidence from a field experiment using teacher performance data. American Economic Journal: Economic Policy, 12(1), 359-388.
- Reinhorn, S. K., & Johnson, S. M. (2014). Can evaluation provide both accountability and development for teachers? Evidence from six high-poverty schools. Project on the Next Generation of Teachers, Harvard Graduate School of Education.
- Reinhorn, S. K., Johnson, S. M., & Simon, N. S. (2017). Investing in development: Six high performing, high-poverty schools implement the Massachusetts teacher evaluation policy. Educational Evaluation and Policy Analysis, 39(3), 383-406.
- Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. The American Economic Review, 94(2), 247-252.
- Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. American Educational Research Journal 50(1), 4-36.
- Sedlak, P. (2020). *Contemporary organisation and management: Challenges and trends* (1st ed., p. 347–357). Wydawnictwo Uniwersytetu ŁóDzkiego. https://doi.org/10.18778/8220-333-2.21
- Simon, N. S., Evans, G. W., & Maxwell, L. E. (2007). Building quality, academic achievement and self-competency in New York City public schools. School Building Design and Learning Performance with a Focus on Schools in Developing Countries. Comportements, 41-50.
- Simon, N.S. & Johnson, S.M. (2015). Teacher turnover in high-poverty schools: What we know and can do. Teachers College Record, 117(3), 1-36.
- Simon, N.S., Johnson, S.M., & Reinhorn, S.K. (2015). The challenge of recruiting and hiring teachers of color: Lessons from six high-performing, high-poverty, urban schools. Project on the Next Generation of Teachers Working Paper, Harvard University.
- Simon, N.S., Johnson, S.M., & Reinhorn, S.K. (2019). Making a match: How successful high-poverty schools hire teachers. Ed Working Papers, Annenberg Institute at Brown University.
- Smith, T. M. & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? American Educational Research Journal, 41(3), 681-714.
- Spillane, J. P. (2012). Distributed leadership. Jossey Bass.
- Spilt, J. L., Koomen, H. M., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher—student relationships. Educational Psychology Review, 23(4), 457-477.

- Steinberg, M. P., & Sartain, L. (2020). What explains the race gap in teacher performance ratings? Evidence from Chicago Public Schools. Educational Evaluation and Policy Analysis, 43(1), 60-82.
- Supovitz, J. A., D'Auria, J., & Spillane, J. P. (2019). Meaningful & sustainable school improvement with distributed leadership. Consortium for Policy Research in Education.
- Swanson, J., & Welton, A. (2019). When good intentions only go so far: White principals leading discussions about race. Urban Education, 54(5), 732-759.
- Tait, M. (2008). Resilience as a contributor to novice teacher success, commitment, and retention. Teacher Education Quarterly, 35(4), 57-75.
- Taylor, E. S. & Tyler, J. H. (2012). The effect of evaluation on teacher performance. The American Economic Review, 102(7), 3628-3651.
- The New Teacher Project (TNTP). (2012). The Irreplaceables: Understanding the real retention crisis in America's urban schools. The New Teacher Project.
- Tschannen-Moran, M. & Hoy, A.W. (2001). Teacher efficacy: capturing an elusive construct. Teaching and Teacher Education, 17(7) 783-805.
- Tuters, S. (2017). What informs and inspires the work of equity minded teachers. Brock Education: A Journal of Educational Research and Practice, 26(2), 47-61.
- Viano, S., Pham, L. D., Henry, G. T., Kho, A., & Zimmer, R. (2020). What teachers want: School factors predicting teachers' decisions to work in low-performing schools. American Educational Research Journal, 58(1), 201-233.
- Villegas, A. M., & Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. The Urban Review, 42(3), 175-192.
- von der Embse, N., & Mankin, A. (2020). Changes in teacher stress and wellbeing throughout the academic year. Journal of Applied School Psychology.
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. Race, Ethnicity, and Education, 8(1), 69-91.

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